

IN THE CLAIMS

Please amend the claims as shown below, in which deletions are indicated by strikethrough and/or double brackets, and additions are indicated by underscoring. This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Currently Amended). A multi-cylinder internal combustion engine, comprising an engine block having a plurality of oil galleries formed therein, an oil filter and an oil cooler operatively attached to the engine block, and a balancer rotatably disposed within said engine block;

wherein said oil filter is attached to a side surface of said engine block;

wherein said oil cooler and said balancer are each respectively attached to a front central portion of said multi-cylinder internal combustion engine;

said engine further comprising an oil pan having an oil reservoir portion formed therein for temporarily storing engine oil, and an oil pump for drawing oil from ~~[[an]]~~ the oil reservoir portion of the oil pan and for supplying the oil to individual portions of the internal combustion engine after passing the oil through the oil filter and the oil cooler;

wherein said engine block is configured with a main oil gallery and an oil supply passage formed therein, said oil supply passage extending from an area proximate the oil cooler to a medial portion of the main oil gallery, so that oil from said oil cooler is introduced via the oil supply passage to a substantially central part of ~~[[a]]~~ the main oil gallery formed in said engine block.

Claim 2 (original). A multi-cylinder internal combustion engine as set forth in claim 1,
further comprising a crankshaft having a plurality of crankshaft webs, wherein said balancer

comprises a driven gear and wherein an intermediate crankshaft web of said crankshaft is provided with a drive gear thereon; and wherein said drive gear on said crankshaft is meshed with the driven gear of said balancer so as to thereby drive said balancer.

Claim 3 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil filter can be detached from said engine without interference from components of said engine.

Claim 4 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil cooler improves oil flow throughout said engine so that oil pressure is uniform.

Claim 5 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil filter comprises an oil filter case and an oil filter element.

Claim 6 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil cooler and said balancer are so situated throughout said engine so as to maintain a weight balance from left to right.

Claim 7 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil cooler is utilized with a water-cooled version of said engine, and wherein an additional cooling effect is achieved by running airflow over said oil cooler when said engine is moving through space.

Claim 8 (Currently Amended). A multi-cylinder internal combustion engine ~~as set forth in claim 1~~, comprising an engine block having a plurality of oil galleries formed therein, an oil filter and an oil cooler operatively attached to the engine block, and a balancer rotatably disposed within said engine block;

wherein said oil filter is attached to a side surface of said engine block;

wherein said oil cooler and said balancer are each respectively attached to a front central portion of said multi-cylinder internal combustion engine;

and wherein said engine further comprises

a crankshaft comprising webs, and

bearings surrounding selected portions of said crankshaft webs,

an oil pan, and

an oil pump for drawing oil from an oil reservoir portion of the oil pan and for supplying the oil to individual portions of the internal combustion engine after passing the oil through the oil filter and the oil cooler;

wherein said engine is configured so that oil from said oil cooler is introduced to a substantially central part of a main oil gallery formed in said engine block;

and wherein during engine operation, said oil cooler supplies oil, which is of uniform pressure and has a cooling effect, to said bearings of said engine.

Claim 9 (Currently amended). A multi-cylinder internal combustion engine as set forth in claim 8, wherein said balancer is powered by a driving mechanism which is narrower than one of said crankshaft webs.

Claim 10 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil filter case is easily removable for ease of maintenance.

Claim 11 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said balancer is located near the gear drive assembly unit.

Claim 12 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil cooler is disposed at the front of said engine, so that said oil cooler is receptive of moving airflow.

Claim 13 (original). A multi-cylinder internal combustion engine as set forth in claim 1, wherein said oil cooler is disposed centrally along said engine, so as to distribute oil evenly to said engine internal components.

Claim 14 (original) A multi-cylinder internal combustion engine adapted to be transversely mounted in a vehicle frame, said engine comprising

an engine block having a front surface and having a plurality of oil galleries formed therein;

a crankshaft disposed in the engine block and having a longitudinal axis which is substantially parallel to the front surface of the engine block;

an oil cooler attached to the front surface of the engine block; and

a balancer rotatably disposed in the engine block and comprising a balance weight;

wherein the oil cooler and the balancer are respectively disposed proximate a substantially central portion of the front surface of the engine block.

Claim 15 (Currently Amended). ~~The internal combustion engine of claim 14, further comprising~~ A multi-cylinder internal combustion engine adapted to be transversely mounted in a vehicle frame, said engine comprising

an engine block having a front surface and having a plurality of oil galleries formed therein;

a crankshaft disposed in the engine block and having a longitudinal axis which is substantially parallel to the front surface of the engine block;

an oil cooler attached to the front surface of the engine block;

an oil filter situated proximate the oil cooler and oriented substantially orthogonal thereto; and

a balancer rotatably disposed in the engine block and comprising a balance weight; wherein the oil cooler and the balancer are respectively disposed proximate a substantially central portion of the front surface of the engine block.

Claim 16 (original). The internal combustion engine of claim 14, wherein the crankshaft has an integral balancer drive gear thereon, and the balancer comprises a driven gear which is enmeshed with said balancer drive gear.

Claim 17 (original). The internal combustion engine of claim 14, wherein said engine comprises a balancer support shaft which is supported and non-rotatably fixed onto an interior wall of the engine block, and wherein said balancer is rotatably mounted on said balancer support shaft.

Claim 18 (original). The internal combustion engine of claim 14, wherein the oil cooler is mounted on the front side of an intermediate cylinder, and wherein the balancer is positioned on the front side of another intermediate cylinder.

Claim 19 (original). The internal combustion engine of claim 14, wherein said engine is configured so that oil from said oil cooler is introduced to a substantially central part of a main oil gallery formed in said engine block.

Claim 20 (original). A motorcycle, comprising:
a frame, and
an internal combustion engine mounted transversely in said frame, wherein the internal combustion engine is the engine of claim 14.